# Hilltop Tacoma Link Extension

### System Expansion Committee

02/10/2022



### Why we are here

#### Hilltop Tacoma Link Extension Update

• Information only briefing of current project status

#### **Today's Proposed Board Actions**

• To inform the System Expansion Committee for recommendations to Board to increase the project budget, revise revenue service date and increase contingency for construction, vehicles and professional services contracts



### **Today's Presentation**

- Project Overview
- Financial Snapshot
- Risk and Contingency Management
- Lessons Learned
- Construction Work Ongoing and Remaining
- Cost and Schedule Drivers
- Key Issues and Challenges
- Questions





### Hilltop Tacoma Link Extension (HTLE)

#### **Project Overview**

- 2.4 mile extension
- Seven new station platforms
- Five new vehicles
- Operations and Maintenance Facility expansion
- 76% complete



### **Current HTLE Financial Snapshot**

Project Baseline Budget	\$252.7
Committed	<b>\$226.4</b> 90%
Incurred	\$204.0 <sup>80%</sup>

- Financials as of December 2021
- Project baselined in September 2017, budget rebaseline June 2020
- Year of Expenditure dollars
- Trends indicate the baseline budget of \$252.7M requires more funding to address updated estimate at completion due to delay to completion of the work and start of revenue service.



### **Risk and Contingency Management**

#### May 2021

- Top Risks
  - ✓ Available float
  - ✓ LRV
  - ✓ Testing and Commissioning
- Post-Primary Mitigation Results
  - ✓ Insufficient budget
  - ✓ Delay
  - ✓ Pandemic

#### January 2022 - Preliminary

- Top Risks
  - ✓ Testing and Commissioning
     ✓ LRV
     ✓ Permanent Power
- Post-Primary Mitigation Results
   ✓ Insufficient budget
  - ✓ Delay
  - ✓ Pandemic



### **Cost and Schedule Drivers**

#### Construction

 Change orders due to design revisions and contractor performance issues meeting planned production rates delayed substantial completion of the contract.

- Administration and professional services
  - Extended duration of the construction contract requires longer period of service for design support during construction, construction management professional services and Agency staff.

#### Tacoma LRV

• Settlement of claims due to manufacturing delays by car builder and associated longer period of service for testing and inspection support.



### Lessons Learned

For at-grade construction in City ROW, the agency should consider:

#### Design

- Engineering procedures
- Civil/systems integration
- Design submittal timelines

#### **Third Parties**

 Agreements – roles and responsibilities during construction

### **Construction**

- Contract delivery method allocation of risk
- Change management
- Use of incentives
- Ensure adequate contingencies

#### **Vehicles**

 Allow time for concept verification for car builder



### **Ongoing- Construction**





**Ongoing - LRV** 





## **Remaining Work**

#### Civil

- Station Finishes
- Curb and gutter; ADA ramps
- Roadway restoration
- 9<sup>th</sup> and Commerce cutover

#### **Systems**

Vehicles

- OCS Wiring and Registration
- TPSS Stations power
- Signalization

#### **Testing and Commissioning**

- Infrastructure
- Light Rail Vehicles





## **Key Issues and Challenges**

- Maintaining a high level of safety awareness and accident prevention
- Tight budget and limited contingency
- Likely construction contract claims
- Stakeholder and neighborhood impacts during construction
- Contractor performance
- Public outreach during construction
- Impacts to operations cutovers



# Today's Proposed Board Actions

## Hilltop Tacoma Link Extension

Resolution No. R2022-003 Motion No. M2022-09 Motion No. M2022-10 Motion No. M2022-11





#### Hilltop Tacoma Link Extension: Baseline Budget: \$252.75M

Approved



Today's Action

**Future Action** 

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# Hilltop Tacoma Link Extension:Board approves \$30M for additional authorizedALLOCATION \$ COMMITMENTSproject allocation



**Today's Action** 

Approved

**Future Action** 

SoundTransit



# **Hilltop Tacoma Link Extension:** Baseline Budget: \$282.75M ALLOCATION \$ COMMITMENTS

Approved



Today's Action

**Future Action** 

SoundTransit

# Hilltop Tacoma Link Extension:Board approves \$18.4M in final design, constructionALLOCATION \$ COMMITMENTSconstruction services and vehicles phase



Today's Action

Approved

**Future Action** 

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